

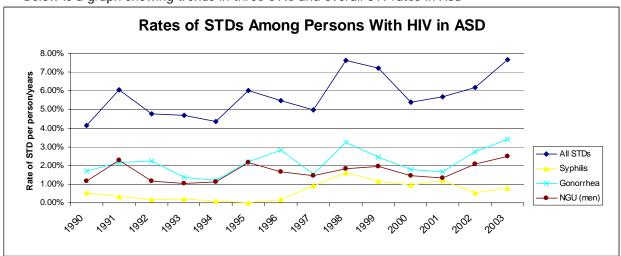
HIV/AIDS HIV-Related Illnesses and Co-morbidities (other than opportunistic illnesses)

BACKGROUND: People with HIV infection are at high risk for a wide range of illnesses. Among the most severe illnesses are AIDS-defining opportunistic illnesses (OIs) which are summarized in the 'Facts about AIDS' section. In addition to OIs, there are other important conditions for HIV-infected persons and their caregivers to consider. The co-morbidity information below was derived from Adult/Adolescent Spectrum of HIV-related Diseases (ASD) project data. ASD is a dynamic prospective longitudinal medical-record review cohort project. As of November 2005, 4,639 people had been followed in ASD for an average of 3.5 years each, beginning in 1989.

SEXUALLY TRANSMITED INFECTIONS:

Sexually transmitted infections (STIs), also known as venereal disease, or STDs, are important as markers of ongoing risk-taking among HIV-infected people. In addition, having an STI greatly increases the risk of HIV transmission.

- The overall rate of diagnosis of any STI in the ASD cohort was 6% per year.
- Gonorrhea rates averaged 2% per year, syphilis 1% per year, chlamydia 1% per year, pelvic
 inflammatory disease in women 3% per year and non-gonococcal urethritis in men 2% per year.
 Below is a graph showing trends in three STIs and overall STI rates in ASD



HEPATITIS PREVALENCE and INCIDENCE:

Hepatitis B (HBV) and hepatitis C (HCV) are viral infections of the liver. In the chronic state, they greatly increase the risks of severe liver disease including cirrhosis and liver cancer. About 10-20% of people infected with HBV as an adult, and about 80-85% of persons infected with HCV become chronic carriers. Although hepatitis probably does not worsen the course of HIV infection, HIV infection can contribute to more severe hepatitis. Furthermore, hepatitis (or its outcomes, such as cirrhosis) may limit HIV treatment options. In addition, when viral hepatitis newly develops in a person infected with HIV, it suggests that the person may be engaging in unsafe sexual or needle sharing behaviors.

- In the Adult/Adolescent Spectrum of HIV-related Diseases project, 41% and 42% of 2,499 people followed since 1998 were screened for hepatitis B and C respectively.
- 9% of HIV-infected people screened for HBV had chronic HBV infection and 19% screened for HCV



- had chronic HCV infection.
- The prevalence of hepatitis B did not vary substantially by mode of HIV exposure (roughly 10% HBV prevalence for men who have sex with men [MSM] and injection drug users [IDU], the two major exposure groups) among those screened. The prevalence of hepatitis C was highest among MSM IDU (67%) followed by heterosexual IDUs (37%) and non-injecting MSM (8%).

LATENT TUBERCULOSIS INFECTION:

TB is a greater threat to a person infected with HIV because of the greater risk of disease acquisition and progression to active TB in an HIV infected person.

- 54% (2524/4639) of the ASD cohort have tuberculin skin test (TST or PPD) results documented in their medical records
- Of these, 13% (337/2524) were documented to be TST positive, generally suggesting latent infection with *M. tuberculosis*.
- Of these, 53% (178/337) received prophylactic isoniazid (INH) to decrease their risk of developing active tuberculosis.

MENTAL ILLNESSES: ? add references

Mental illness can impair an HIV-infected person's ability to receive prevention and treatment services.

- Schizophrenia and other psychoses have been present in about 2% of the ASD cohort each year since 1990. In comparison, about 1% of the general population are diagnosed with schizophrenia.
- Bi-polar disorder was diagnosed in 6% of the ASD cohort. Trend data show a slight increase from 3% in 1990 to 8% in 2003. Bi-polar type 1 disorder occurs among 0.4% to 1.6% of the general population.
- Depression is the most commonly diagnosed mental illness, present in about 28% of ASD patients per year. Depression prevalence increased from 20% in 1990 to 35% in 2003. At any given time, 3-6% of Americans suffer from clinical depression, but this increases to 20-25% of persons with a chronic medical condition.

SUBSTANCE USE:

Like persons with mental illness and HIV, those individuals who have substance abuse and HIV may have difficulties accessing prevention and treatment services.

- Injection drug use was present in about 8% of the ASD cohort each year 1990-2003.
- Alcohol problems [which may be documented as current alcoholism, or a history of alcoholism with current treatment] was present in 15% of the ASD cohort each year 1990-2003.
- Other drug use was diagnosed in 10% of the cohort each year, 1990 through 2003.
- Tobacco use. About 32% of enrollees have tobacco use mentioned in their medical records, including smoking cigarettes or cigars and chewing tobacco. There has been a gradual decline in tobacco use, from a high of 38% in 1995 to 32% in 2003.

PERSONS WITH DISABILITIES:

- Hearing disabilities: 2.4% of the ASD cohort has been diagnosed with hearing disabilities, including
 complete and partial deafness. There have been no noticeable trends in prevalence over the 14 years
 of the study.
- <u>Visual disabilities</u>: Over the course of ASD, 9.5% of the cohort has had a diagnosis of visual impairment, including complete and partial blindness. Visual impairment increased in the early 1990's, and reached a plateau of 14% 1993 through 1996. Probably due to HAART-associated decreases in cytomegalovirus (CMV) retinitis, visual impairment diagnoses have been cut in more than half and were found in 6% of the cohort in 2003.
- <u>Impaired mobility:</u> About 1% of 1,000 HIV-infected persons followed by ASD, have had mobility impairments diagnosed, including paraplegia, semiplegia, and/or other types of paralyses.